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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,732	07/13/2001	Brian Paul Chadwick	28110/36120B	8069

4743 7590 10/02/2002

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EXAMINER
DECLOUX, AMY M

ART UNIT	PAPER NUMBER
1644	7

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/905,732	Chadwick et al.
Examiner	**Art Unit**
DeCloux, Amy	1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-18 is/are pending in the applica

4a) Of the above, claim(s) _____ is/are withdrawn from considera

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claims 1-18 are subject to restriction and/or election requirem

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 CFR121:

Group I, claims 1-7, drawn to an isolated polynucleotide , a vector and a host cell, classified in class 435, subclasses 320.1 and 252.3, and class 536, subclass 23.1,
Group II, claims 8-9, drawn to an isolated polypeptide, classified in class 530, subclass 350 and Class 514, subclass 12,
Group III, claim 10, drawn to an antibody, classified in class 530, subclass 387.9,
Group IV, claims 11-13, drawn to a method for detecting a polynucleotide, classified in class 435, subclass 6,
Group V, claim 14, drawn to a method for detecting a polypeptide, classified in Class 435, subclass 7.8,
Group VI, claims 15-16, drawn to a method for identifying a compound that binds to a polypeptide, classified in class 435, subclasses 6 and 7.8,
Group VII, claims 17-18, drawn to a method of modulating activity of a polypeptide, classified in class 424, subclass 184.1.

2. Inventions I and IV are related as a product and a processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. 806.05(h)). In the instant case, the isolated polynucleotide can be used for other purposes such as the production of DNA vaccines.

3. Inventions III and V/VII are related as products and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. 806.05(h)). In the instant case, the antibody can be used for affinity purification.

4. Inventions I/II/III are different products. Invention I differs from Inventions II/III in that they comprise different chemical structures and different physical-chemical properties, since Invention I includes a nucleotide while Inventions II/III consists of a polypeptide and an antibody. Inventions II and III are not related since they are classified in different classes, are structurally unique proteins (i.e. antibody and NTPase), have different biochemical properties and biological functions. Therefore Inventions I/II/III are patentably distinct. .

5. Inventions IV/V/VI/VII are different methods. These inventions require different

process steps and endpoints. Invention IV is drawn to a method of detecting a polynucleotide, while Invention V is drawn to a method of detecting a polypeptide, and Invention VI is drawn to a method of identifying a compound that binds to said polypeptide, and accordingly said methods of these three inventions have distinct endpoints, as does Invention VII, drawn to a method of modulating the activity of said polypeptide. Inventions IV/V/VI/VII utilize different method steps and have distinct endpoints and is therefore, patentably distinct.

6. Because the inventions are distinct for the reasons given above and the search required for each Group is not required for the other and because each Invention has acquired a separate status in the art as shown by their different classification and divergent subject matter, restriction for examination purposes as indicated is proper.

7. If Group I or IV is elected, the applicant is further required under 35 U.S.C. 121 to elect **one of the following groups of nucleotide sequences**:

A) encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:2 as recited in Claims 1a and 1b, and SEQ ID NO:1 as recited in Claim 1k,

B) encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:4 as recited in Claims 1c and 1d, and SEQ ID NO:3 as recited in Claim 1l,

C) encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:6 as recited in Claims 1e and 1f, and SEQ ID NO:5 as recited in Claim 1m,

D) encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:8 as recited in Claims 1g and 1h, and SEQ ID NO:7 as recited in Claim 1n,

E) encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:9 as recited in Claims 1i and 1j.

8. If Group II is elected, the applicant is further required to elect **one of the following groups of amino acid sequences**:

A) comprising the amino acid sequence of SEQ ID NO:2 as recited in Claims 8a and 8b,

B) comprising the amino acid sequence of SEQ ID NO:4 as recited in Claims 8c and 8d,

C) comprising the amino acid sequence of SEQ ID NO:6 as recited in Claims 8e and 8f,

D) comprising the amino acid sequence of SEQ ID NO:8 as recited in Claims 8g and 8h,

E) comprising the amino acid sequence of SEQ ID NO:9 as recited in Claims 8i and 8j.

9. If Group II/V/VI/VII is elected, the applicant is further required to elect **one of the following groups of amino acid sequences**:

A) comprising the amino acid sequence of SEQ ID NO:2 as recited in Claims 8a and 8b,

B) comprising the amino acid sequence of SEQ ID NO:4 as recited in Claims 8c and 8d,

C) comprising the amino acid sequence of SEQ ID NO:6 as recited in Claims 8e and 8f,

D) comprising the amino acid sequence of SEQ ID NO:8 as recited in Claims 8g and 8h,

E) comprising the amino acid sequence of SEQ ID NO:9 as recited in Claims 8i and 8j.

10. Applicant is required, in response to this action, to elect a specific embodiment to which the claims shall be restricted if no generic claim is finally held to be allowable. The response must also identify the claims readable on the elected embodiment, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

11. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional embodiments which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected embodiment. MPEP § 809.02(a).

12. The following claim(s) are generic: claims 1, 2 and 8.

13. The species are distinct each from the other for the following reasons:

A) The recited nucleic acid sequences encode different proteins which have different biochemical characteristics, structure and functions.

B) The recited amino acid sequences have different biochemical characteristics, structure and functions

14. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

15. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy DeCloux whose telephone number is (703) 306-5821. The examiner can normally be reached Monday through Friday from 9:00 am to 6:00 pm. Or a message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

Amy DeCloux, Ph.D.
Patent Examiner
9-30-2002

Patrick J. Nolan, Ph.D.
Primary Patent Examiner
Group 1640